

REMARKS

The Examiner objected to claims 3, 9, 13, 15-17, 19, 23, 24, 26, 27 and 30 due to informalities.

In particular, the Examiner objects claims 3, 13, 23 and 30 for containing the trademark/trade name "PCI Express". Claims 3, 13, 23 and 30 have been amended. The Examiner also objected to claims 3, 9, 13, 15-17, 19, 23, 24, 26, 27 and 30 for lacking antecedent basis. Claims 3, 9, 13, 15-17, 19, 23, 24, 26, 27 and 30 have been amended as suggested by the Examiner.

The Examiner rejected claims 1, 2, 4, 11, 14-16 and 21, under 35 U.S.C. §103(a), as being unpatentable over Bosloy et al. (U.S. Patent No. 6,714,544; hereinafter Bosloy) in view of Merritt (U.S. Patent No. 6,393,025; hereinafter Merritt).

The Examiner contends that:

Bosloy as teaching a method that includes initiating (generating; column 11, lines 36-41) a transaction using a protocol (Bosloy discloses method and apparatus to make a network connection using any type of protocol; column 13, lines 58-63). The Examiner also points to Bosloy as teaching a protocol that directs packets (Bosloy discloses protocols that the invention can utilize in the Frame Relay protocol which, as is known in the art, is a packet switching, data link layer protocol) based on physical location (Bosloy discloses two devices [420 and 422] that are addressable within the network; column 11, lines 23-26) of a receiving device (422) over a network (412, 414 and 416) that directs packets based on path routing information in packets (Bosloy discloses a packet switching data link protocol [Frame Relay protocol] wherein, as is known in the art, the packet header contains addressing information unique to the destination for path routing usage). The Examiner also points to Bosloy as teaching the establishing of a virtual link partner relationship (column 17, lines 42-47) between a first component (420) and a second component (422) coupled by the network (412, 414 and 416; column 11, lines 23-35 and column 15, lines 19-35).

The Examiner concedes that Bosloy does not disclose a switching fabric for which the packets can be transmitted to the destination.

The Examiner relies on Merritt as teaching a network that comprises a first component (25) and a second component (75) wherein packets (30) are transmitted through a switching fabric (100 and 200). The Examiner also relies on Merritt as teaching that the packet comprises a payload and a header and is processed using a protocol (column 2, lines 47-65).

The Examiner concludes that it would have been obvious to one of ordinary skill in the art, having the teachings of Bosloy and Merritt before him at the time the invention was made, to modify the network disclosed by Bosloy such that the network comprises the switching fabric taught by Merritt.

Applicants' claim 1 recites initiating a transaction using a protocol that directs packets based on physical location of a receiving device over a switching fabric that directs packets based on path routing information in packets, by establishing a virtual link partner relationship between a first component and a second component coupled by a switching fabric.

No combination of Bosloy and Merritt suggests a virtual link partner relationship is established between a first component and a second component coupled by a switching fabric. This virtual link partner relationship is established for transmitting packets between the first and second component. However, the packets (e.g., Data Link Layer Packets (DLLP)) may not contain routing information needed by the switching fabric to direct the packets. Absent the routing information, signaling is used to represent virtual packets. The virtual packets, and not the actual packets, are sent through the switching fabric.

In contrast, Bosloy is understood to describe establishing connections between telephone networks for sending actual information packets. A processor (referred to as call processor) produces a message (referred to as the network connection establishment request message) that is sent to identify a routing path through an ATM network. Upon sending the message through the ATM network, a path is established to direct a call from one telephone network to another telephone network. In this regard, Bosloy reads:

"The network connection establishment request message includes the information identifying the destination ATM node 438 and the information identifying the channel of the destination communications interface 433 connecting the destination ATM node 438 to the terminating bridging node 430. The source ATM node 434 determines the subsequent node in the ATM network 412 to which the network connection establishment request message should be passed and establishes a cross-connect within the source ATM node 434 making a connection between the channel on the source communications interface 432 identified in the proxy connection establishment request message and the next leg of the path as determined by either the source routing or hop-by-hop routing procedures discussed above..." (Col. 20, lines 7-19)

The call processor described by Bosloy is understood to establish a path through an ATM network. Once established, the path is used to send actual information (i.e., a call) from one telephone network to another telephone network. Thus, Applicants submit that Bosloy does not disclose or suggest establishing a virtual link partner relationship between two components coupled by a switching fabric, as required by independent claims 1, 11, 21 and 28.

Merritt taken separately or in combination with Bosloy does not remedy the foregoing deficiencies of Bosloy. In particular, Merritt neither describes nor suggests establishing a virtual partner relationship between two components coupled by a switching fabric. Rather, Merritt describes converting packets (that are considered time-sensitive) into ATM cells that are delivered to one or more destinations. In this regard, Merritt discloses:

Specifically, when a time-sensitive packet is received by an ATM switch from a source of packets via an incoming trunk, the switch indexes a translation table using the trunk identity to obtain an assigned AAL2 channel and a virtual channel. The switch then converts the received packet to a particular data unit containing at least the assigned AAL2 channel within a virtual channel, and then determines, as a function of the virtual channel index, a virtual path identifier (VPI) and virtual circuit identifier (VCI). The switch then processes, e.g., combines, splits or segments, the particular data unit to form the payload for one or more ATM cells. The switch then forms an ATM cell header containing at least the VPI and VCI, appends the header to each such payload and outputs each cell, in turn, to an output carrying the identified channel. (Col. 1, lines 31-50)

Thus, Merritt describes converting packets into ATM cells for transporting over a network (e.g., an ATM network). As such, the reference is not understood to disclose or suggest establishing a virtual partner relationship between two components coupled by a switching fabric, as required by independent claims 1, 11, 21 and 28.

Accordingly, Applicants respectfully assert that the combination of the teachings of Bosloy and Merritt fail to disclose each and every element of the Applicants' invention as claimed in claims 1, 11, 21 and 28.

As dependent claims 2 and 4 depend upon independent claim 1, Applicants respectfully assert that claims 2 and 4 are also patentable over the combination of cited references. Further, as dependent claims 14-16 depend upon independent claim 11, Applicants respectfully assert that claims 14-16 are also patentable over the combination of cited references.

The Examiner rejected claims 3, 13, 23 and 30, under 35 U.S.C. §103(a), as being unpatentable over Bosloy in view of Merritt and in further view of Vicard (U.S. Patent Publication US 2003/0182415 A1; hereinafter Vicard).

Vicard is not understood to remedy the forgoing deficiencies of Bosloy. For example, Vicard is not understood to describe or suggest establishing a virtual partner relationship between two components coupled by a switching fabric. Rather, Vicard appears to describe a system for placing a machine in a power management state. By adjusting the power management state of a machine, power consumption of the machine may be reduced.

Vicard is understood to describe one methodology for an organization to reduce power consumption. Accordingly, Applicants respectfully assert that no combination of Bosloy, Merritt and Vicard render obvious the features of claims 3, 13, 23 and 30.

The Examiner rejected claims 5-10, 12, 17-20, 22, 24-27 and 29, under 35 U.S.C. §103(a), as being unpatentable over Bosloy in view of Merritt and in further view of Kaganoi (U.S. Patent No. 6,772,269 B1; hereinafter Kaganoi).

Kaganoi is not understood to remedy the forgoing deficiencies of Bosloy. For example, Kaganoi is not understood to describe or suggest establishing a virtual partner relationship between two components coupled by a switching fabric. Rather, Kaganoi appears to describe a system that allows data to be transferred from one adapter to a second adapter in one clock cycle. Accordingly data transfer rates may be increased.

By providing this capability, Kaganoi is understood to describe a system that may increase data transfer rates and potentially allow data flow rates that are independent of processing speed. Applicants contend that the combination of the teachings of Bosloy, Merritt and Kaganoi fail to disclose each and every element of the Applicants' claimed invention of claims 5, for example. Accordingly, dependent claim 5 and claims 6-10, 12, 17-20, 22, 24-27 and 29 respectively which depend directly or indirectly upon independent claims 1, 11, 21 or 28, respectively are allowable over the combination of cited references.

Applicant : Gary A. Solomon et al.
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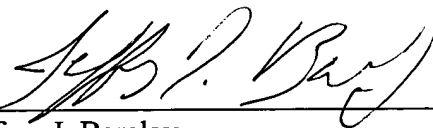
Attorney's Docket No.: 10559-842001 / P16868

Enclosed is a \$120 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050, referencing Attorney's Docket No. 10559-842001.

Respectfully submitted,

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